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Strukturna analiza i antimikrobna aktivnost kompleksa srebra(I) sa 1,10-fenantrolinskim ligandima

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Sintetisani su novi kompleksi srebra(I), $[Ag(1,10\text{-phen})_2]CF_3COO{\cdot}H_2O$ (**Ag1**) i $\{[Ag(5,6\text{-epoxy-}$ -1,10-phen)$]CF_3COO\}_2$ (**Ag2**), 1,10-phen je 1,10-fenantrolin i 5,6-epoxy-1,10-phen je 5,6- -epoksi-5,6-dihidro-1,10-fenantrolin, u reakcijama $AgCF_3COO$ i odgovarajućeg *N*-hetero- cikličnog liganda u 1 : 1 molskom odnosu u etanolu. Kompleksi **Ag1** i **Ag2** su okarakterisani primenom spektroskopskih metoda i rendgenske strukturne analize. Sintetisani kompleksi pokazuju selektivnu aktivnost prema ispitivanim *Candida* sojevima, pri čemu su vrednosti minimalnih inhibitorskih koncentracija između 0,8 i 12,5 μg/mL.

Structural analysis and antimicrobial activity of silver(I) complexes with 1,10-phenanthroline based ligands

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New silver(I) complexes, $[Ag(1,10\text{-phen})_2]CF_3COO{\cdot}H_2O$ (**Ag1**) and $\{[Ag(5,6\text{-epoxy-1,10-}$ -phen)$]CF_3COO\}_2$ (**Ag2**), 1,10-phen is 1,10-phenanthroline and 5,6-epoxy-1,10-phen is 5,6-epoxy-5,6-dihydro-1,10-phenanthroline, were obtained from the reactions of $AgCF_3COO$ and the corresponding *N*-heterocyclic ligand in 1 : 1 molar ratio in ethanol. The **Ag1** and **Ag2** complexes are characterized by spectroscopic methods and a single-crystal X-ray diffraction analysis. The synthesized complexes showed selectivity towards four different *Candida* species with minimal inhibitory concentrations between 0.8 and 12.5 μg/mL.

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